CFAC Review



Science

U.S. DEPARTMENT OF ENERGY

Value Management Approach

- Incorporate VE discussion in design reviews
 - Presentations to all divisions to confirm functional requirements
 - Discussion of cost and performance trade-offs
 - Review by PE ECS Engineers
- Numerous items incorporated during ACD and early Title
- Recently additional items incorporated as part of baseline development
- Additional VE items to be identified as part of formal VE review with VE expert and combined A/E, NSLS II, DOE & CM team
 - Some may be incorporated in T-I
 - Others may be parked for disposition during Title II





Recent VE Items

CF Scope & Cost Reduction Items Direct FY07		Direct FY07\$	Decision date*
1	Shell LOB 4	\$3,550,000	Unlimited
2	Only pursue LEED Silver instead of Gold in Ops and LOB's	\$1,200,000	February-09
3	Reduced Ring Bldg width by 3'	\$532,000	November-07
4	Reduced LINAC Bldg length	\$825,000	November-07
5	Move process cooling tower to infield	\$101,000	November-07
6	Use shorter utility routing	\$35,000	November-07
7	Ops Bldg Entry Lobby 2 story instead of 3	\$180,000	November-07
8	Reduce front end area height by 40 cm	\$429,000	November-07
9	Reduce thickness for Exp Hall and Tunnel floor slab	\$1,029,000	November-07
10	Eliminate return duct in storage ring	\$43,000	November-07
11	Distribute Beamline utilities to half of ring	\$970,000	Unlimited
12	Remove ratchet wall doors for 1/2 of Ring	\$1,200,000	Unlimited
13	Remove allowance for accoustic treaments (keep perf. metal deck)	\$1,000,000	Unlimited
14	Assume BNL removes all structures from site	\$192,000	November-07
15	Remove trees & shrubs from landscaping	\$408,000	Unlimited
Total Reduction \$11,694,000			

*Items that are unlimited can be added back in the facility at any time. Items with a date either require a decision because of collateral design impacts or must be decided at time of construction contract award.





Formal Value Engineering Review

- VE study will be led by trained/certified VE Expert provided by Design Phase CM
- Review team will consist of:
 - NSLS II CF staff and interface managers for ASD & XFD
 - Design A/E architects and engineers
 - DOE observers
 - CM estimators, construction experts
 - PE engineers
- Will produce brainstorm list of VE opportunities
- Evaluate selected opportunities, provide data & recommendations
- NSLS II review and selection of recommended opportunities
- Produce final VE report



